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ABSTRACT

This picture book was designed to be used with an Elementary Science Study unit that provides opportunities for students in grades 4-6 to study animal tracks. Shown within this book are numerous examples of tracks, including those of tires, human beings, animal tracks, and others in various media, such as snow, sand, mud, dust, and cement. (CS)

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TRACK PICTURE BOOK

Elementary Science Study

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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PREFACE

The Elementary Science Study is one of many curriculum development programs in the fields of science, social studies, and mathematics under preparation at Education Development Center, Inc. EDC (a private nonprofit organization, incorporating the Institute for Educational Innovation and Educational Services Incorporated) began in 1958 to develop new ideas and methods for improving the content and process of education.

ESS has been supported primarily by grants from the National Science Foundation. Development of materials for teaching science from kindergarten through eighth grade started on a small scale in 1960. The work of the project has since involved more than a hundred educators in the conception and design of its units of study. Among the staff have been scientists, engineers, mathematicians, and teachers experienced in working with students of all ages from kindergarten through college.

Equipment, films, and printed materials are produced with the help of staff specialists, as well as of the film and photography studios, the design laboratory, and the production shops of EDC. At every stage of development, ideas and materials are taken into actual classrooms, where children help shape the form and content of each unit before it is released to schools everywhere.

ACKNOWLEDGMENTS

The idea for a unit on tracks originated during my work with desert animals in the Wellesley Public Schools. I first taught *Tracks* to two upper elementary classes in Watertown, Mass. Robert Stinson, Cynthia Gilles, and Dorothy Curtis observed these trial classes and also helped me with the *Track Picture Book*. Excepting those identified by a credit line, the track photographs were taken by myself.

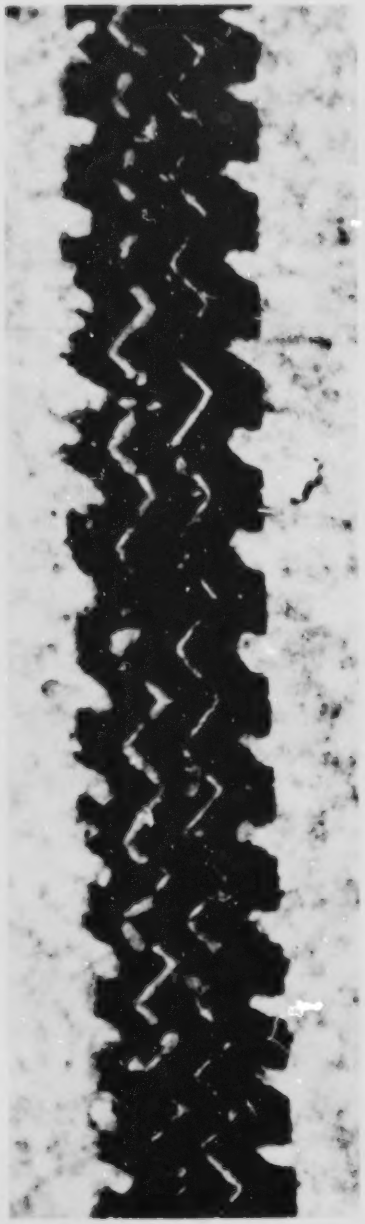
I want to thank Adeline Naiman and Nancy Weston for assisting in the production of this book.

David Webster

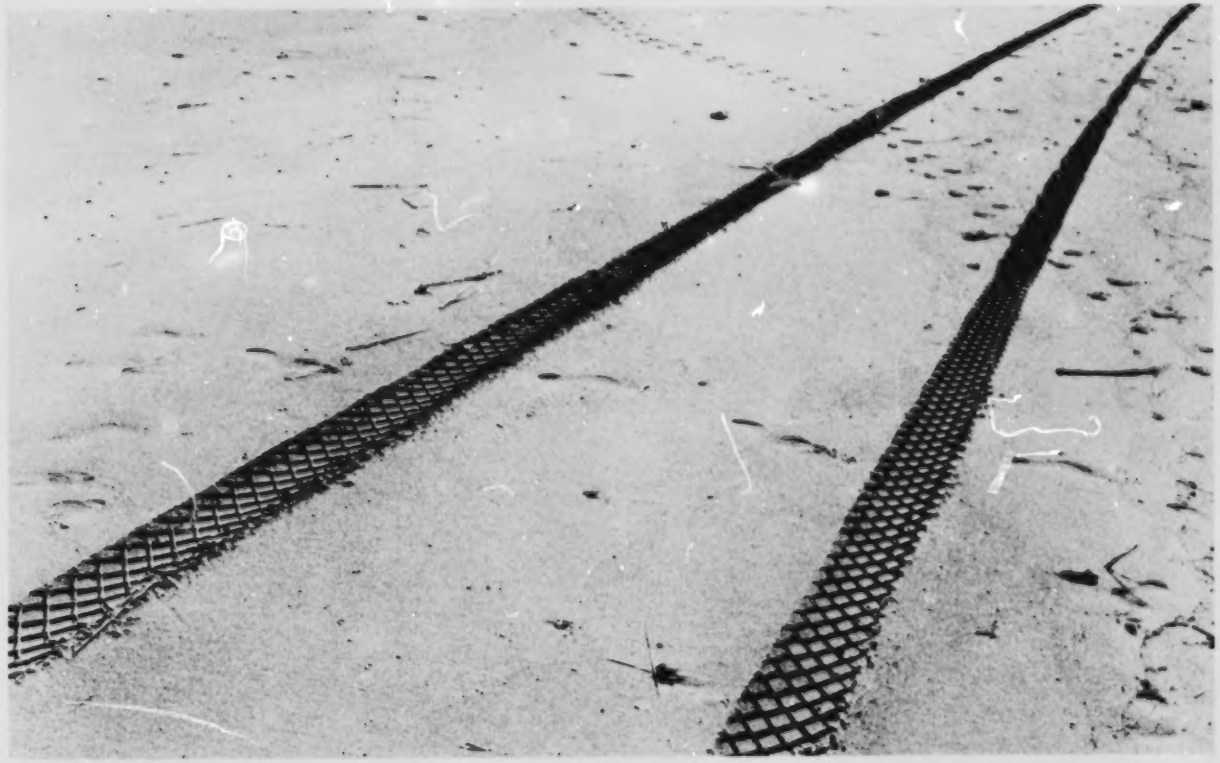
There are tracks everywhere: along the highway, around your house, and in the woods. You can find them in snow, mud, sand, dust, and cement. This book has many photographs of the tracks made by cars and humans and other animals. Look for tracks outside, and try to figure out how they were made.

TIRE TRACKS

Ewing Galloway



Were any of
these tracks . . .



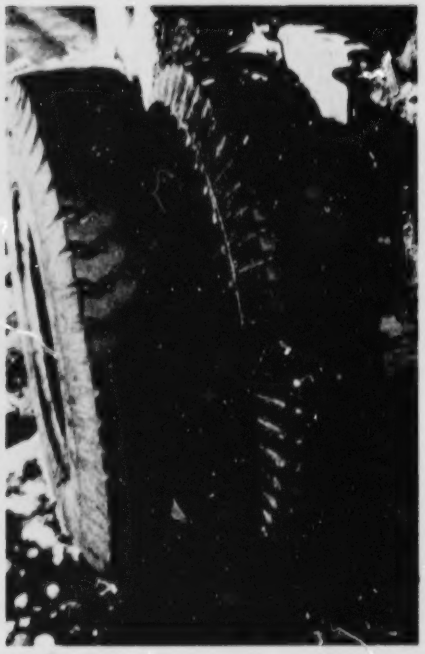
A. Devaney, Inc.

2

7

8

. . . made by any
of these tires?



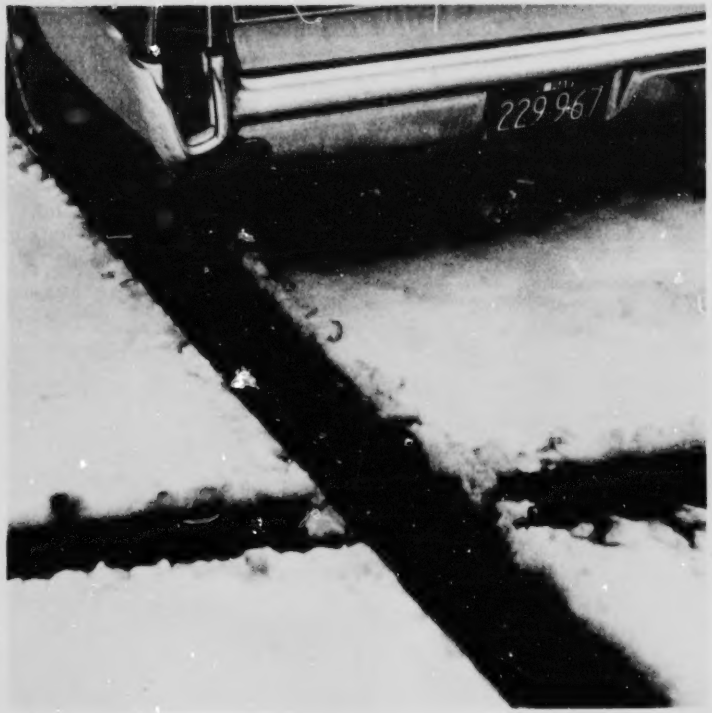
9

10

Which way was the tractor going?

11

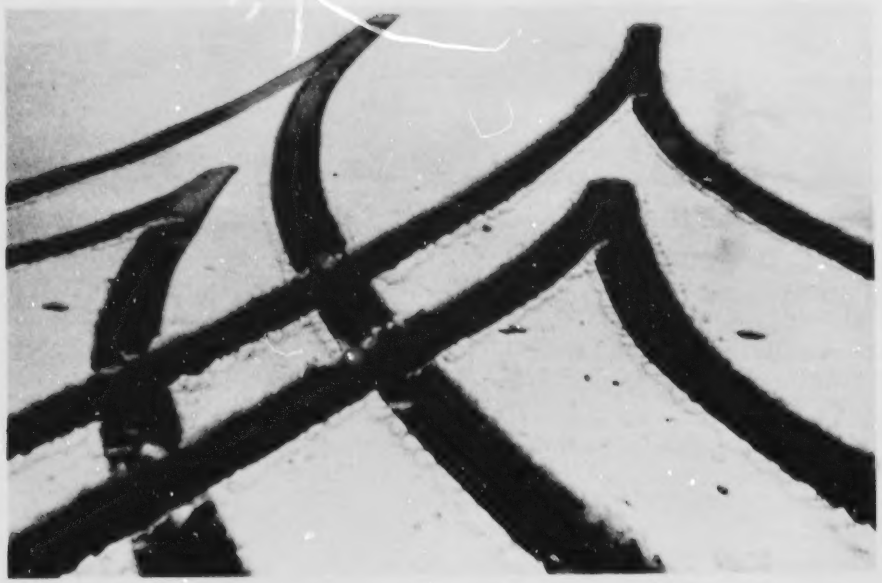
12



Which tracks were
made first?

13

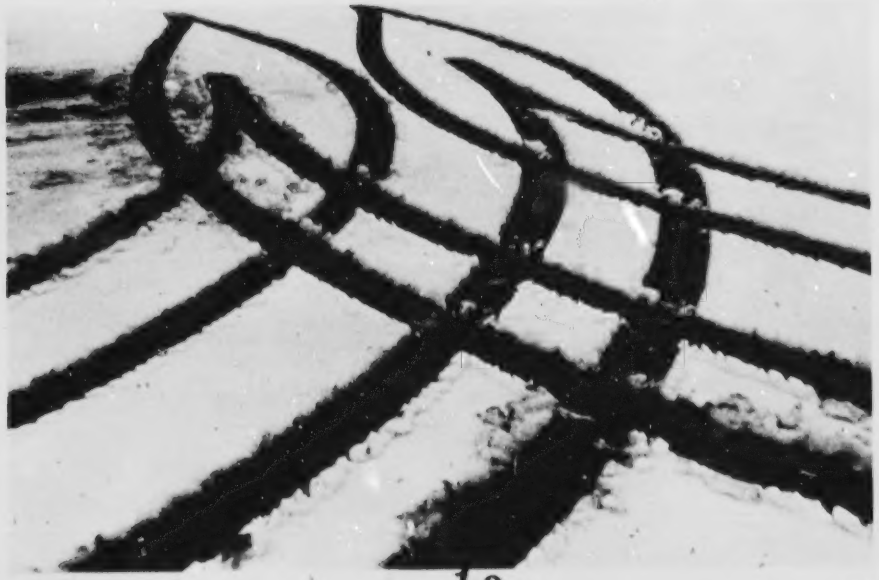
14



What happened here?

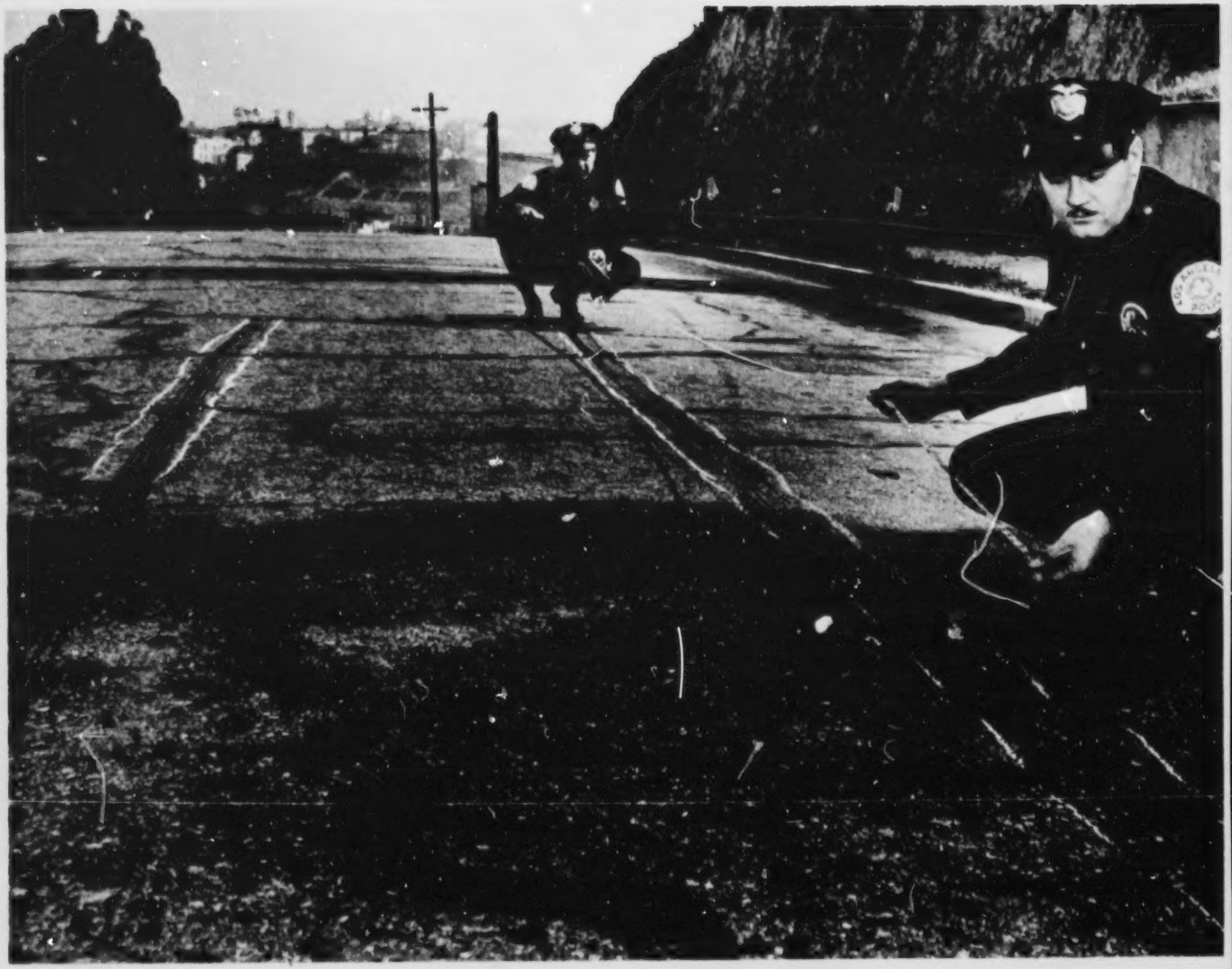
15

How many cars were there?



16

How were these tracks formed?

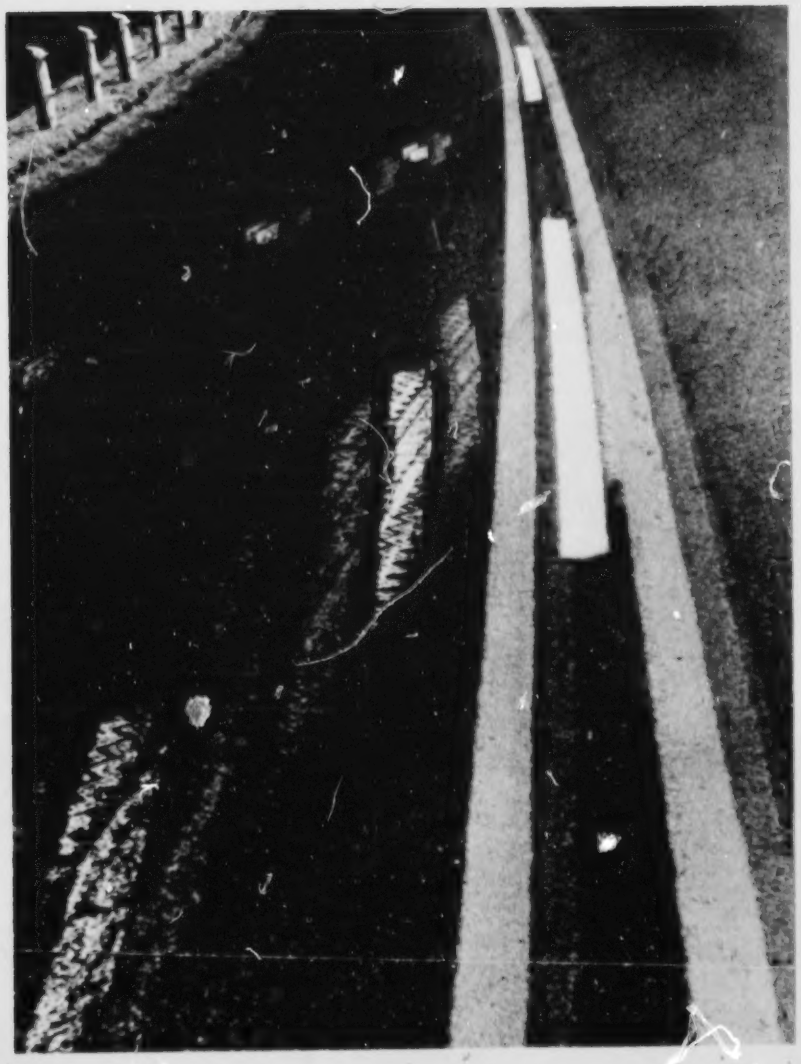


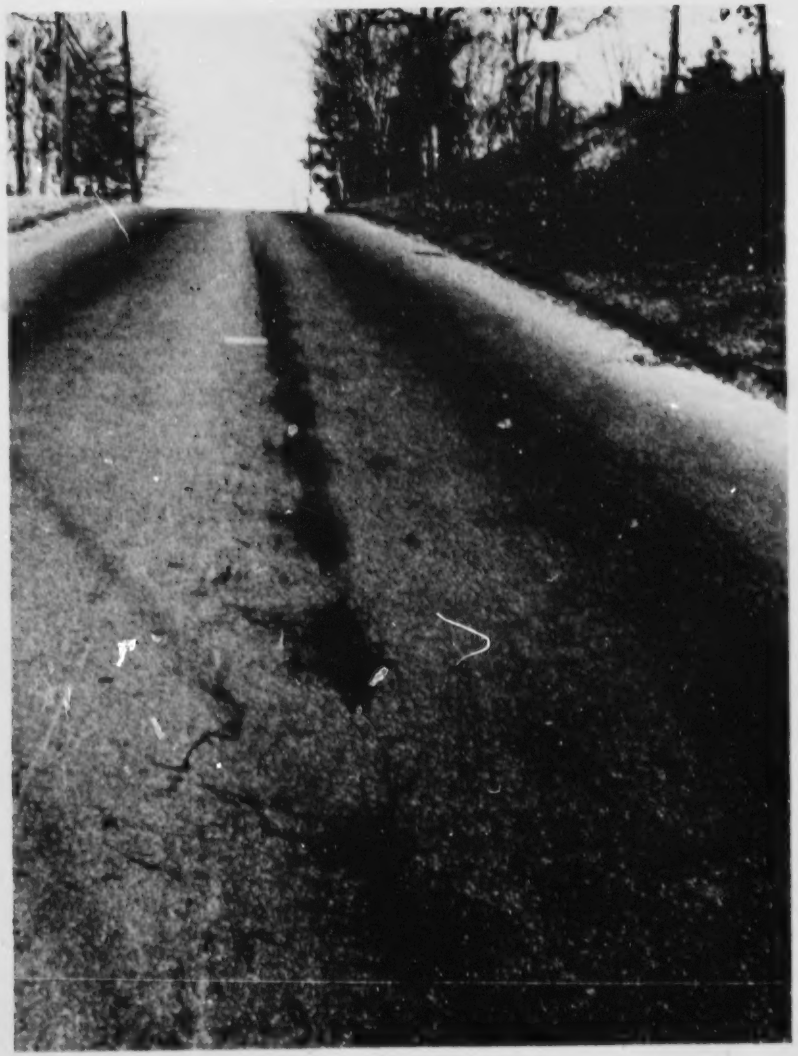
Tom Stimson, F.P.G.

Why do the police sometimes measure skid marks after an accident?

18

What stories do these skid marks tell?





What happens when cars drive over grease or wet paint?

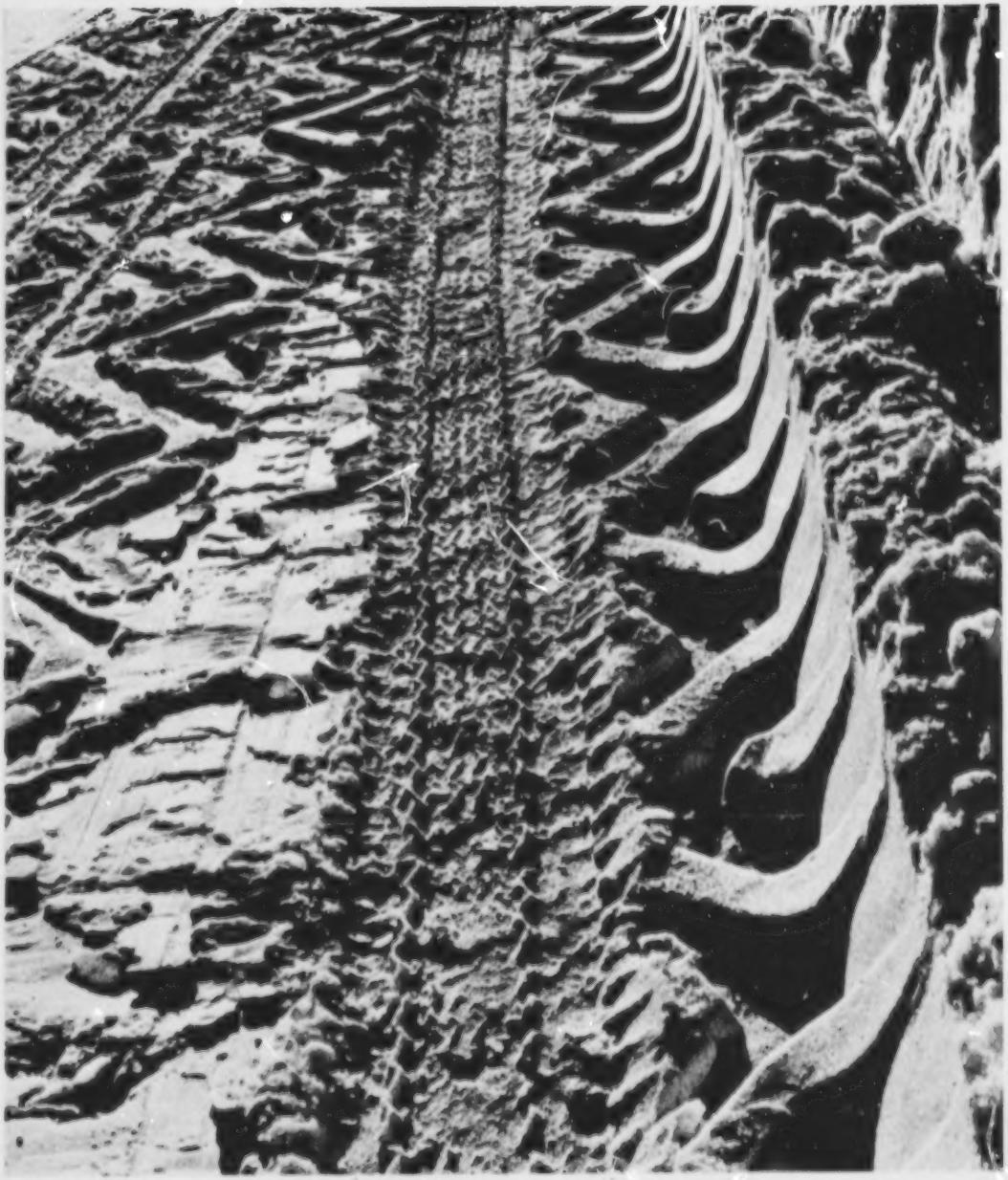
21

22

What happened here?

23

24

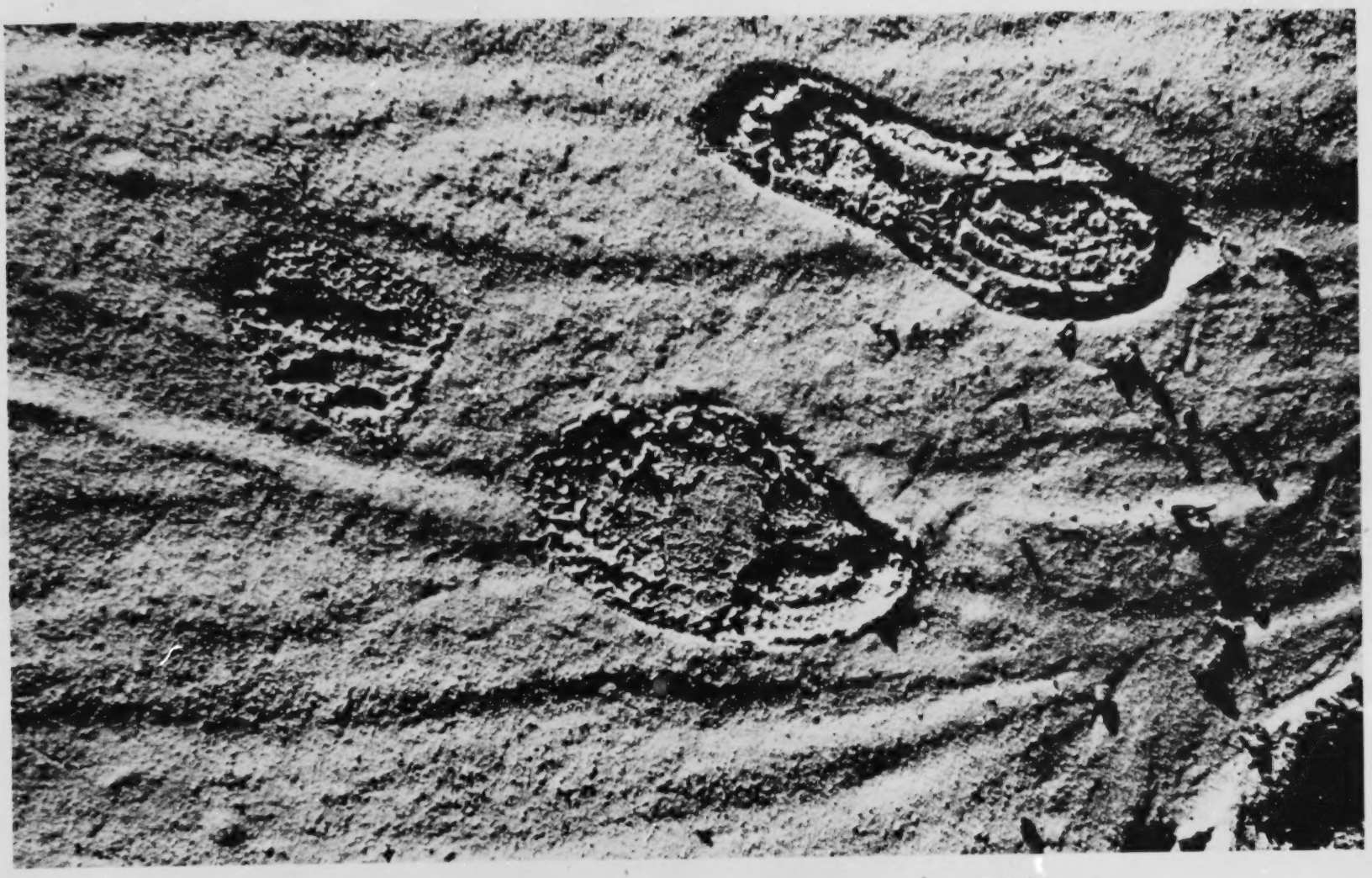


Victor Stokes, E.D.C.

25

HUMAN TRACKS

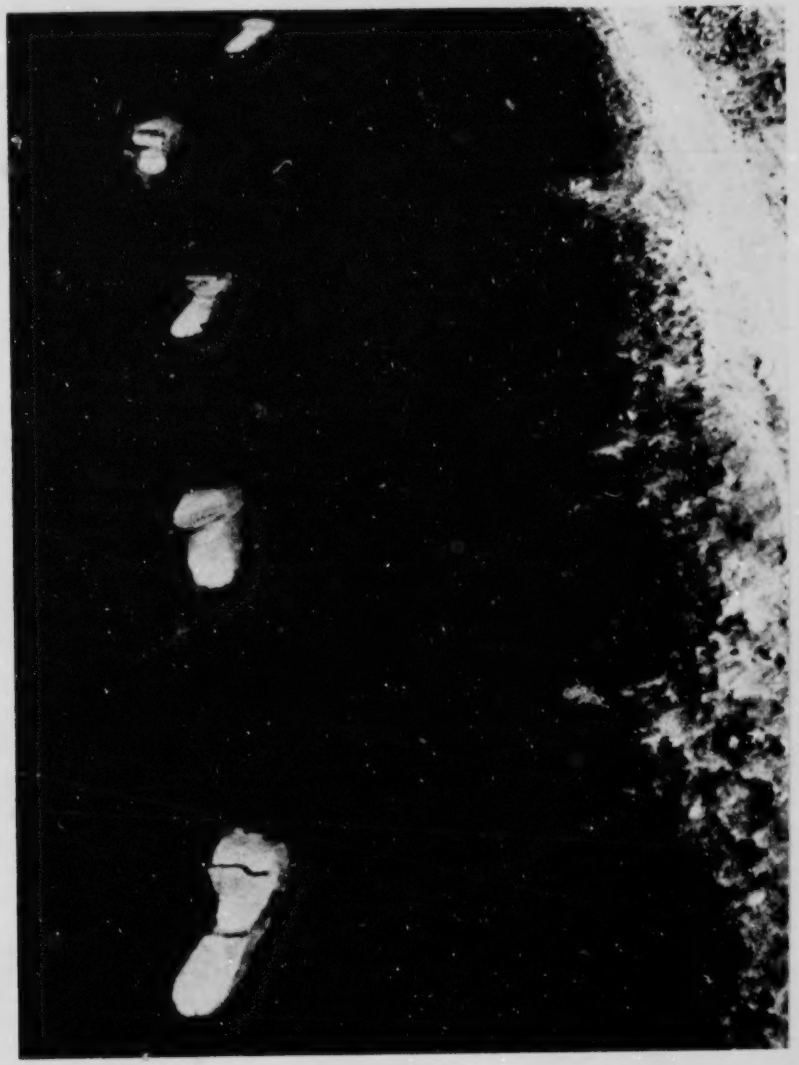
Heinz Wedewardt—Gamma



How much can you tell about these footprints?

Does snow melt in your tracks
because your boots are hot?

Why does a man with snow-
shoes sink into the snow less
than someone without them?

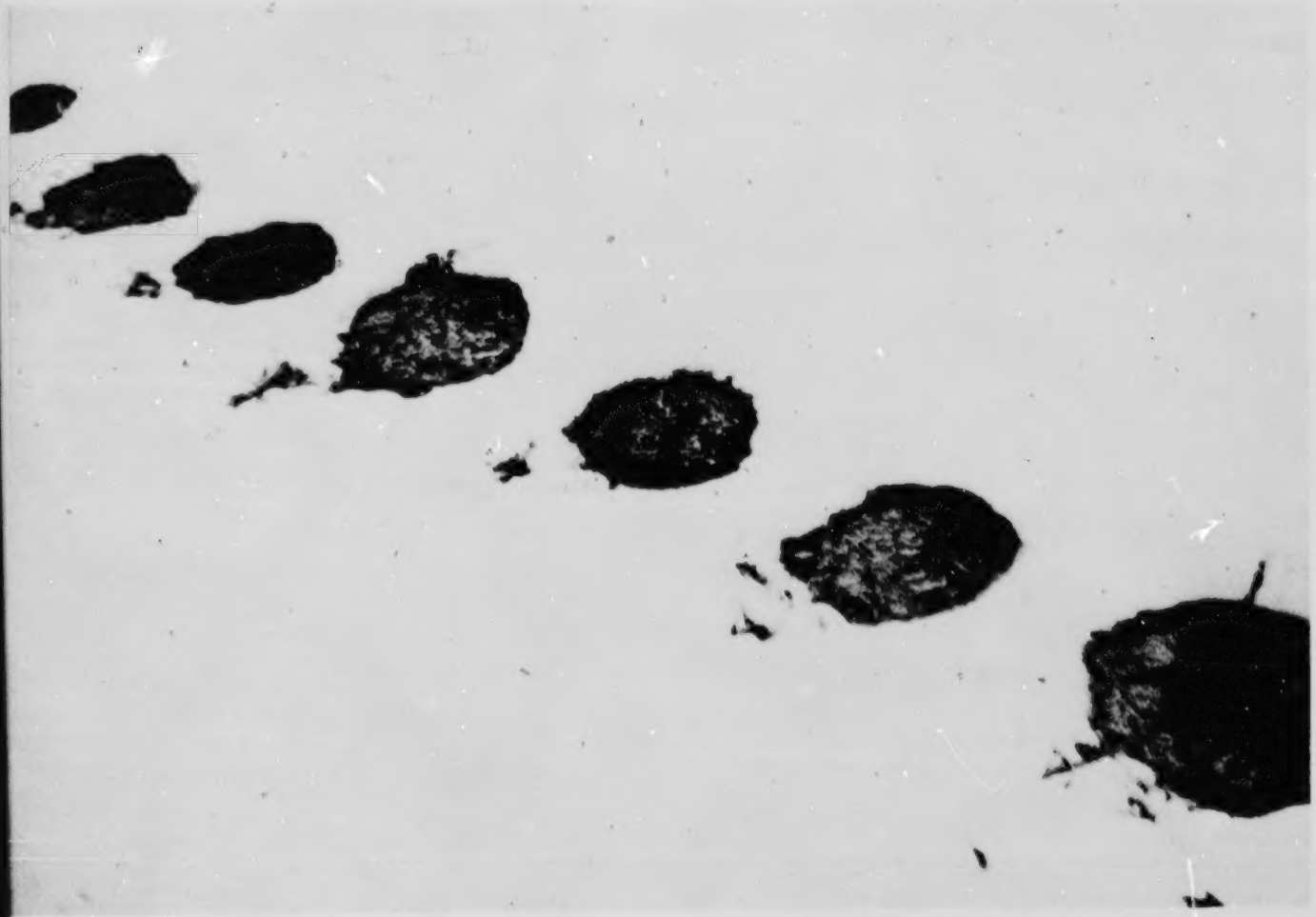


What caused these unusual footprints?

32

33

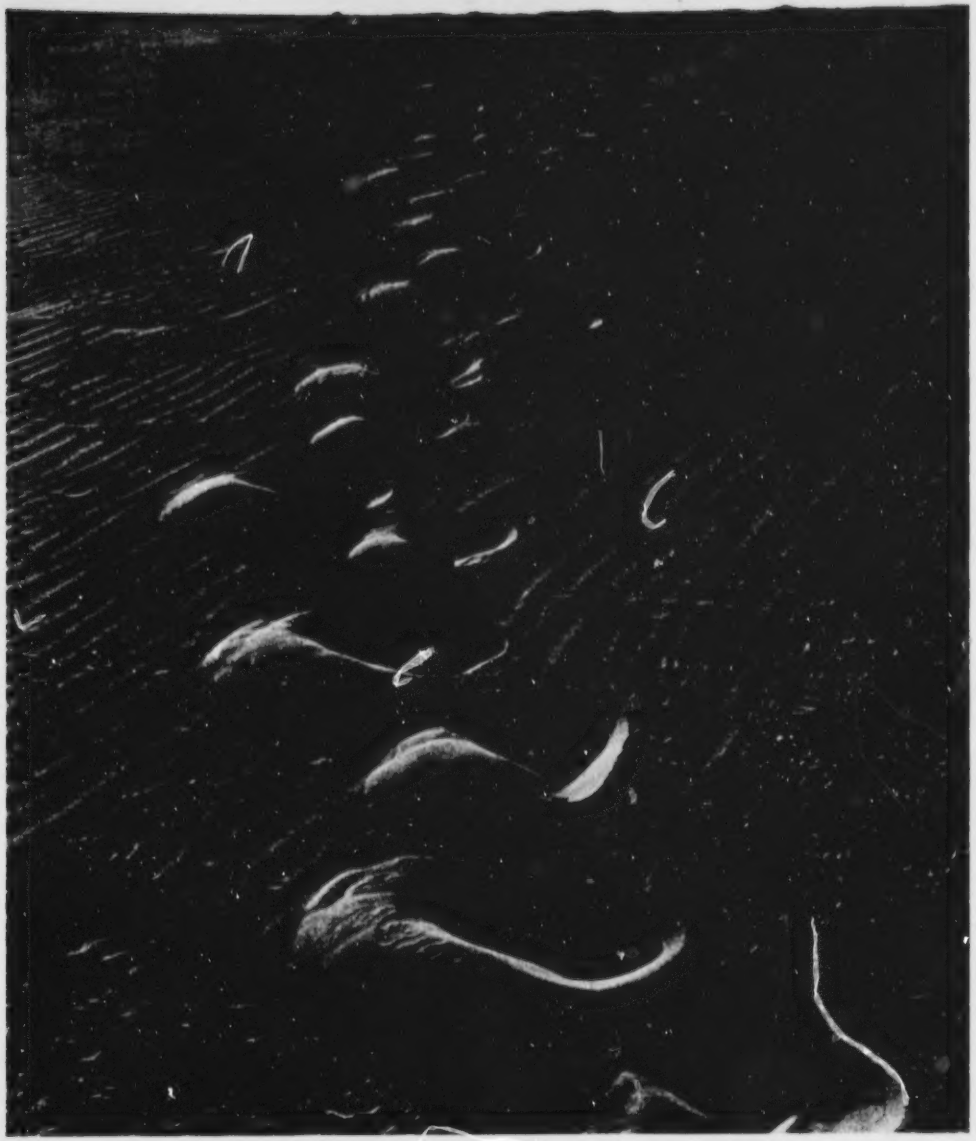
Why do footprints sometimes melt like this?



How would you walk
to leave trails
like these?

35

36



W. L. Riegler from Frederic Lewis, Inc.

37

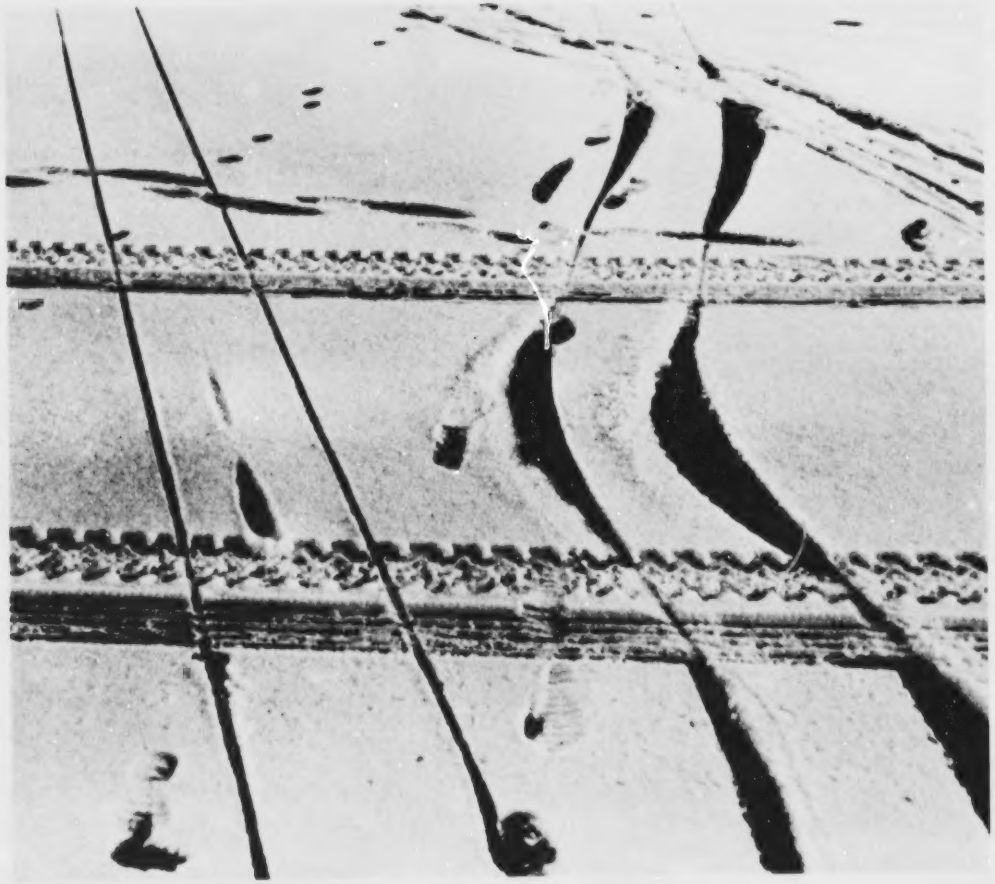
How were these tracks made?

38

39

What made these tracks?

40

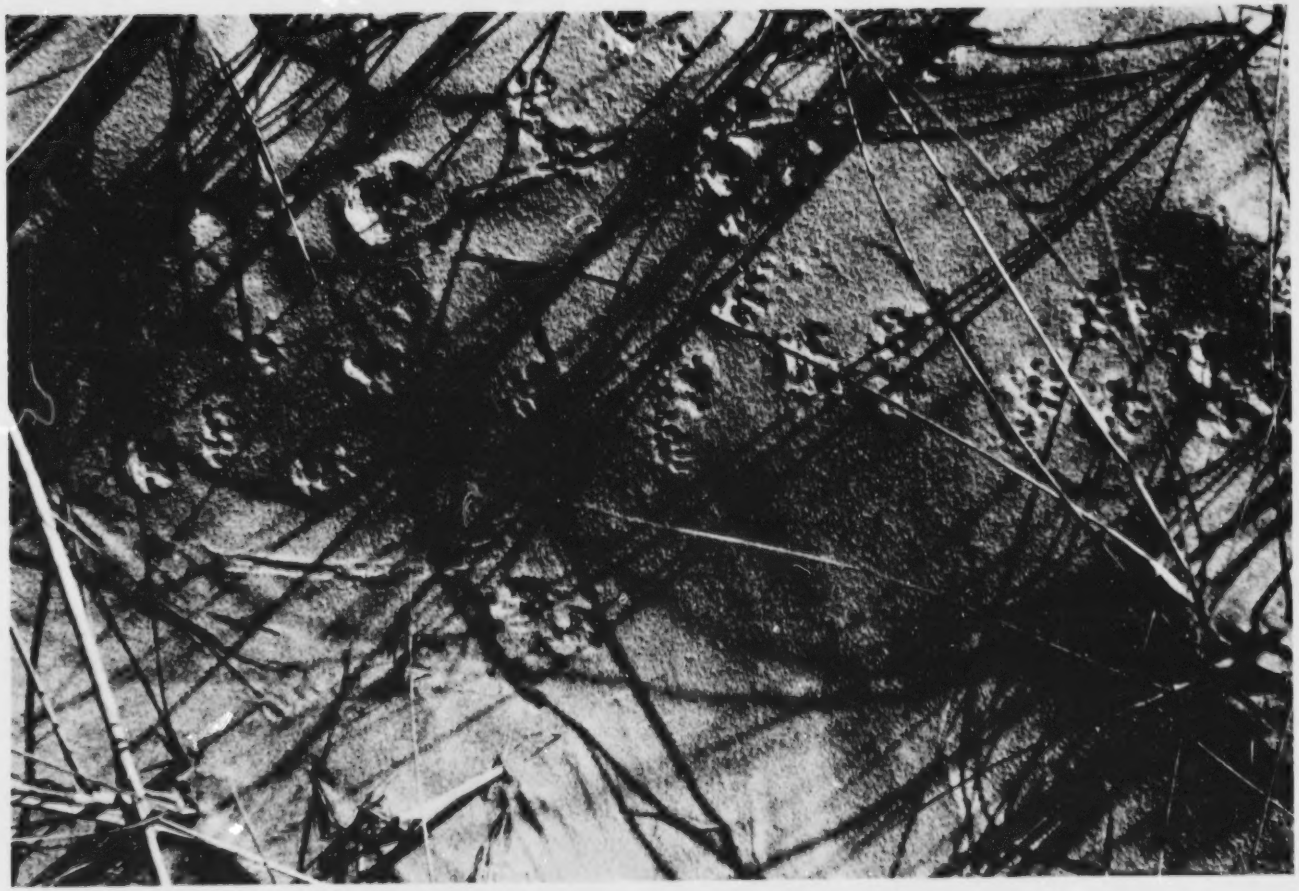


41

42

Albert Steiner—Gamma

ANIMAL TRACKS



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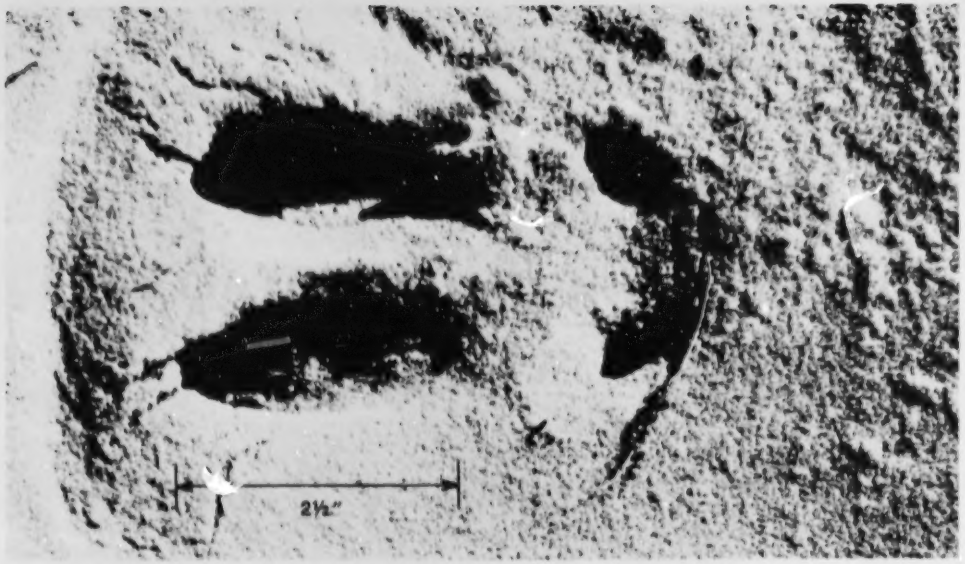
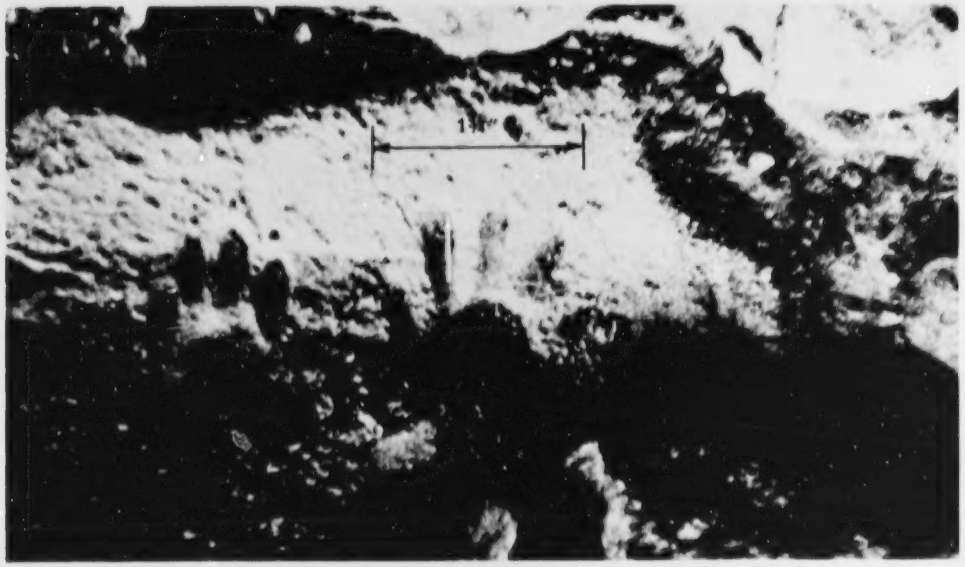
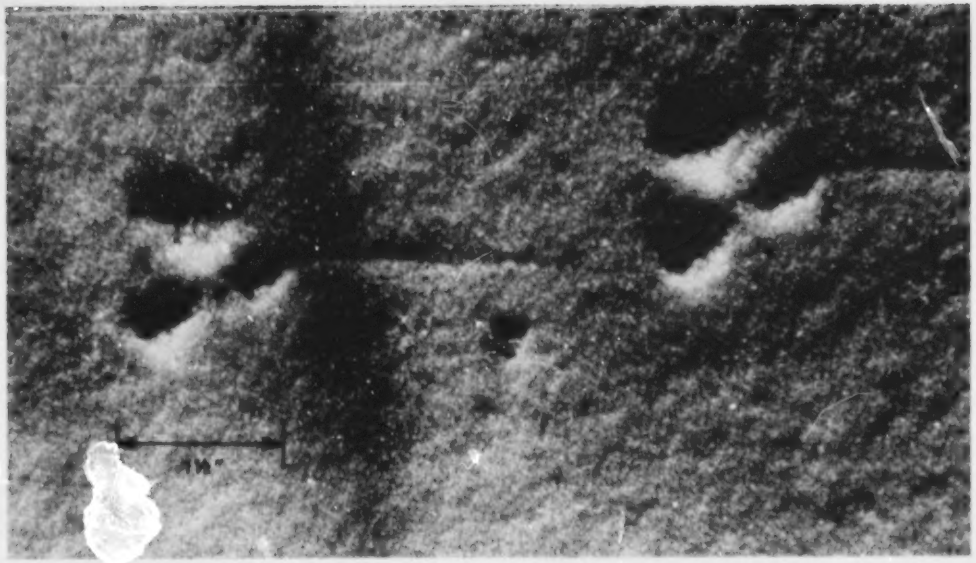


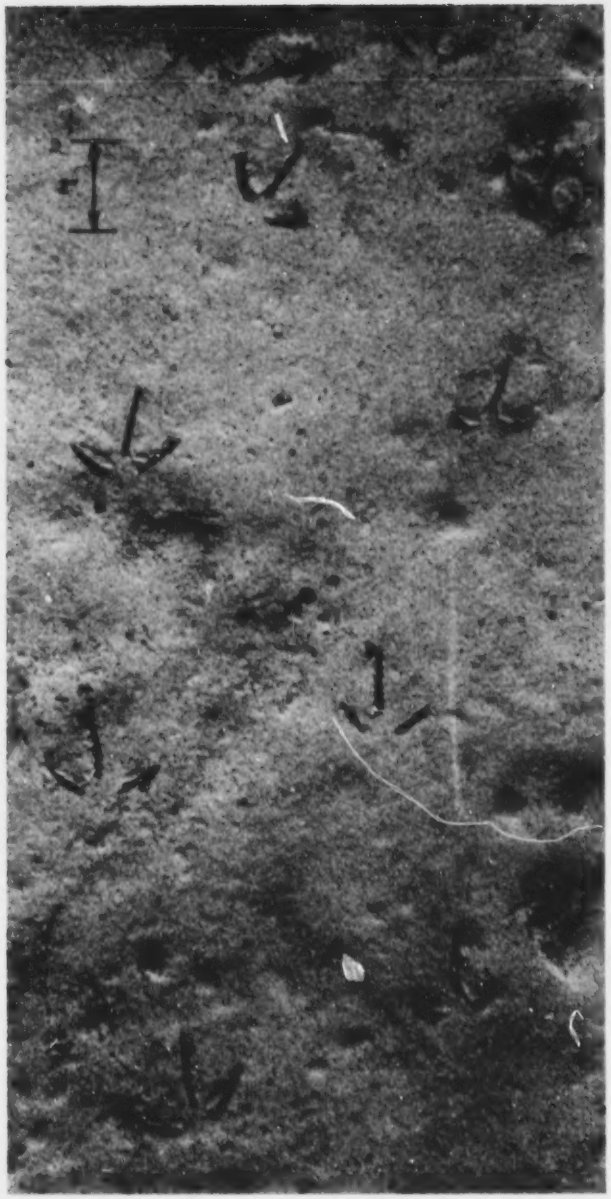


46



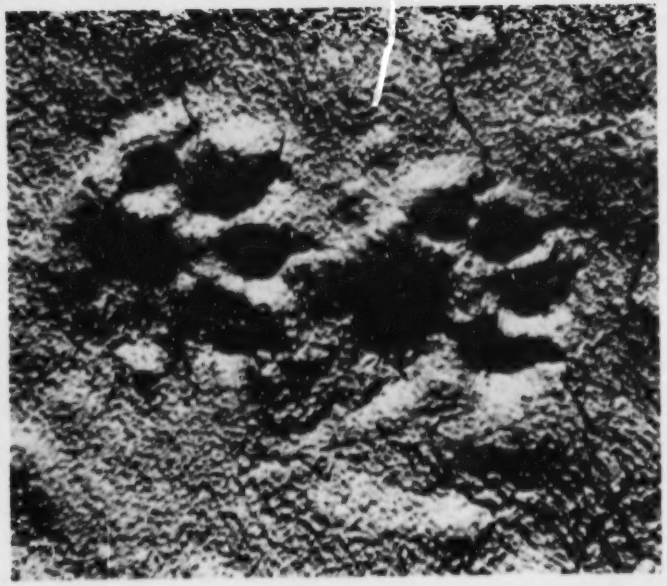
Can you identify
these tracks?

47



48

49



Can you tell the
dog tracks from the
cat tracks?

50

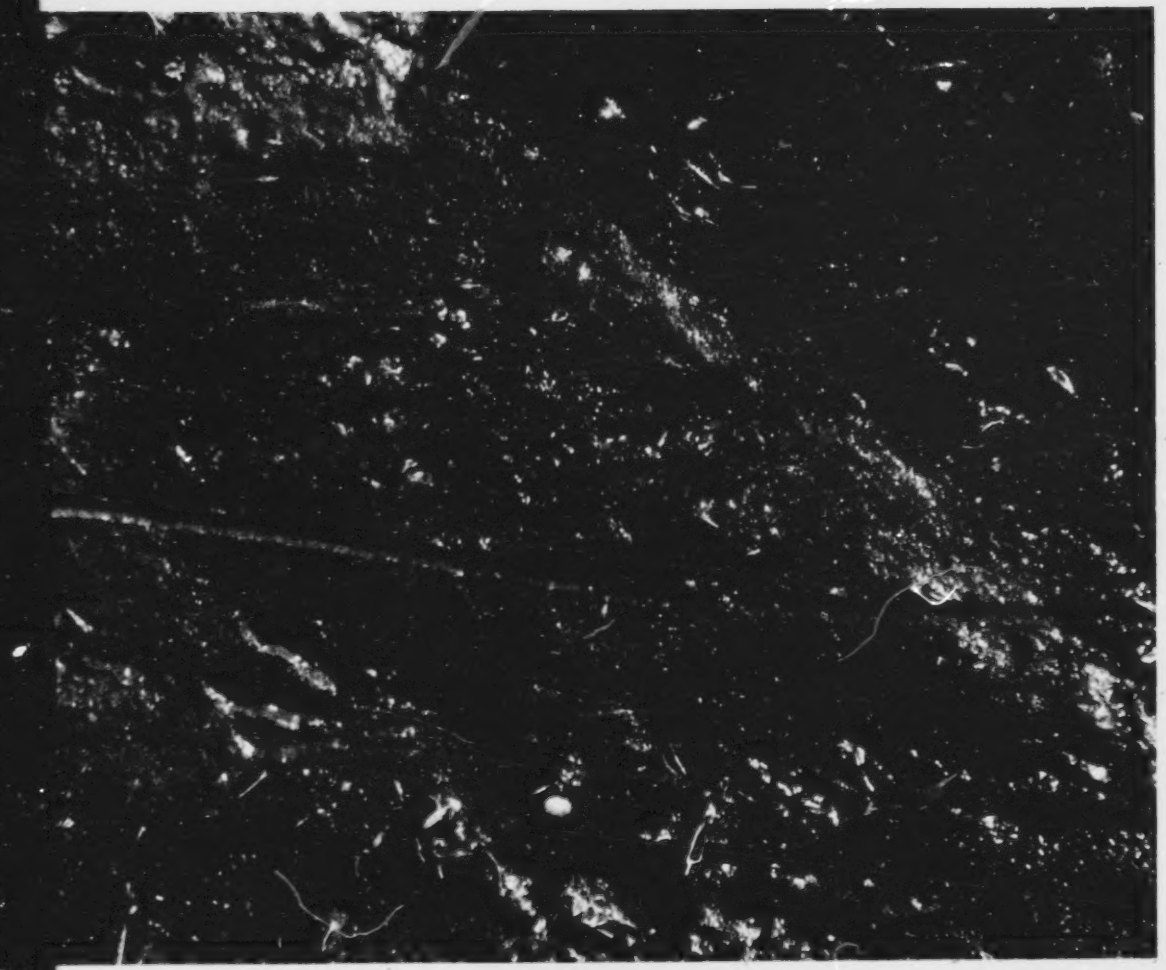
A. Devaney, Inc.

51

How would the footprints of these animals look?

H. Armstrong Roberts

52



ade the line between the tracks?

In which direction were these animals moving?

54

55

Have you ever seen tracks in cement?

How were these dinosaur tracks made in stone?

Victor Stokes E.D.C.

56

57

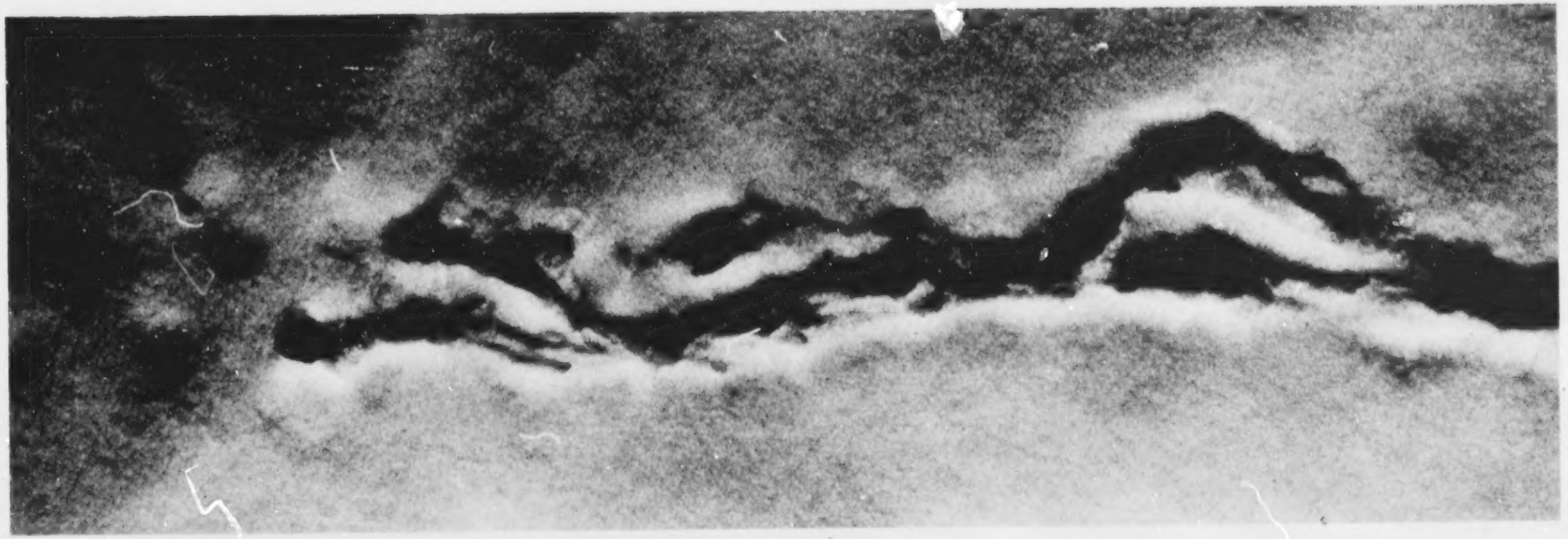
How could you make tracks with ink or poster paint?

Victor Stokes, E.D.C.

58

Victor Stokes, E.D.C.

59



What animals could have made the holes?

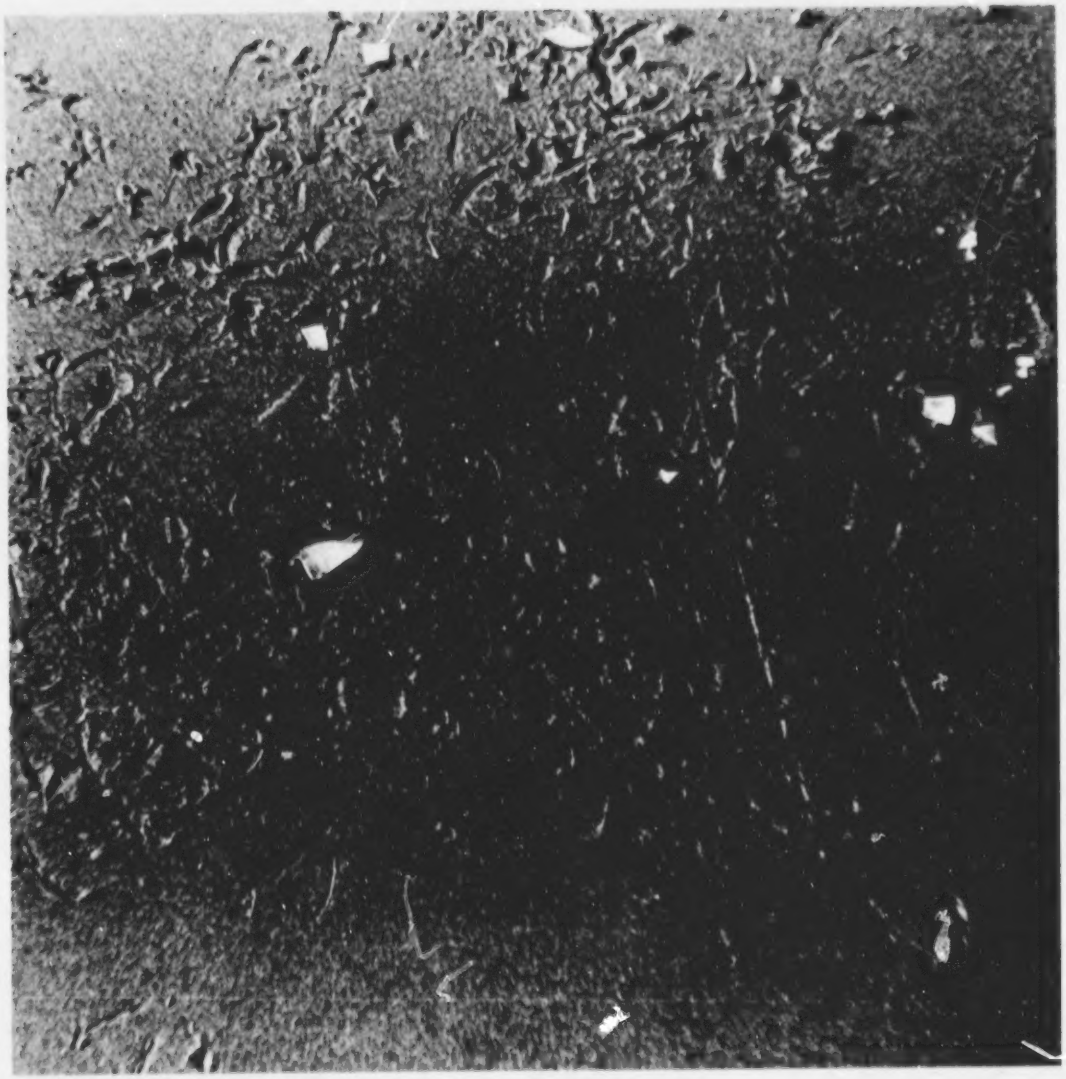
60

61

Courtesy of the American Museum of Natural History

Who was following whom?

Where did the animal that made this track come from, and where did it go?



64

What happened here?

65

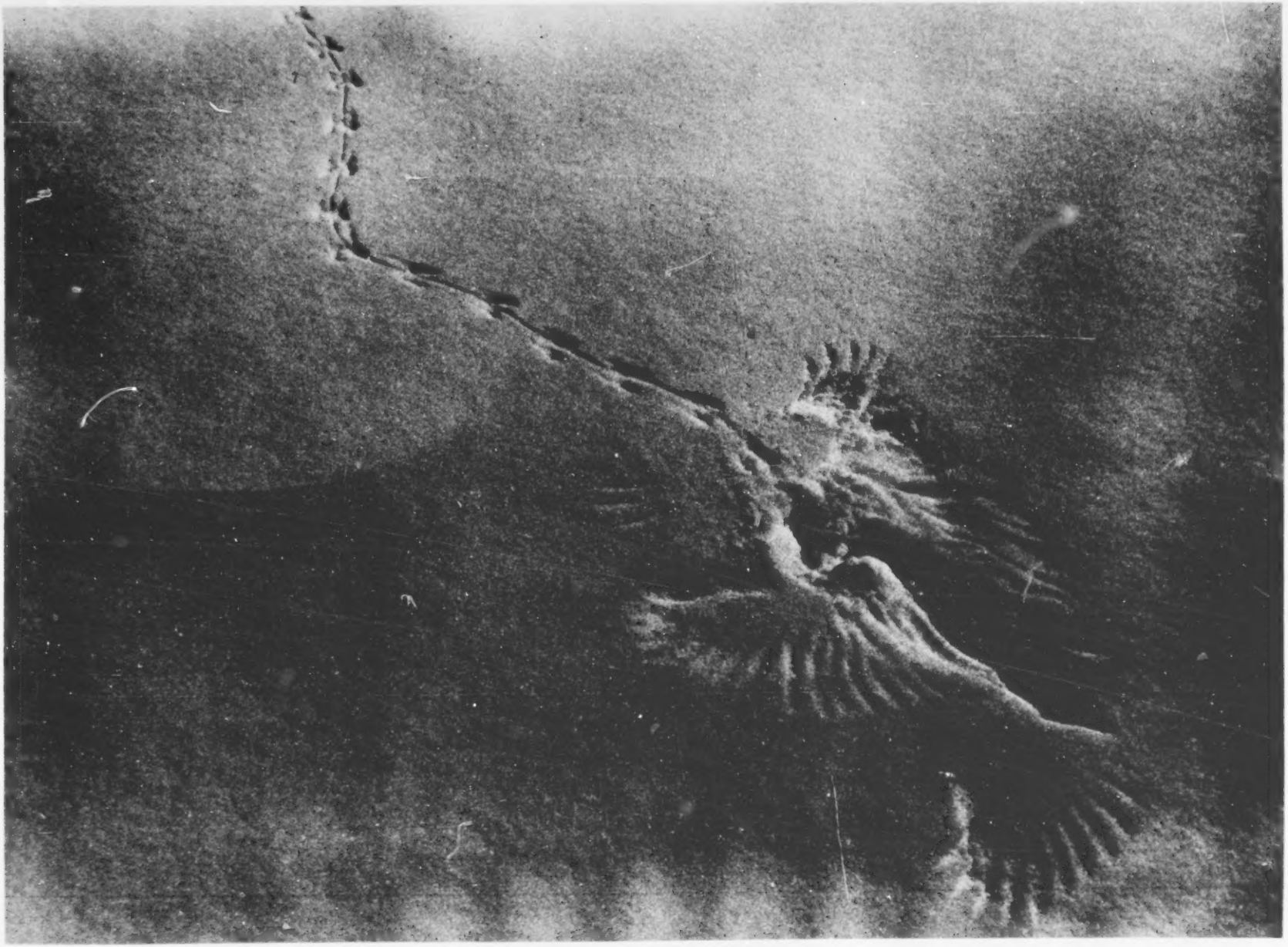
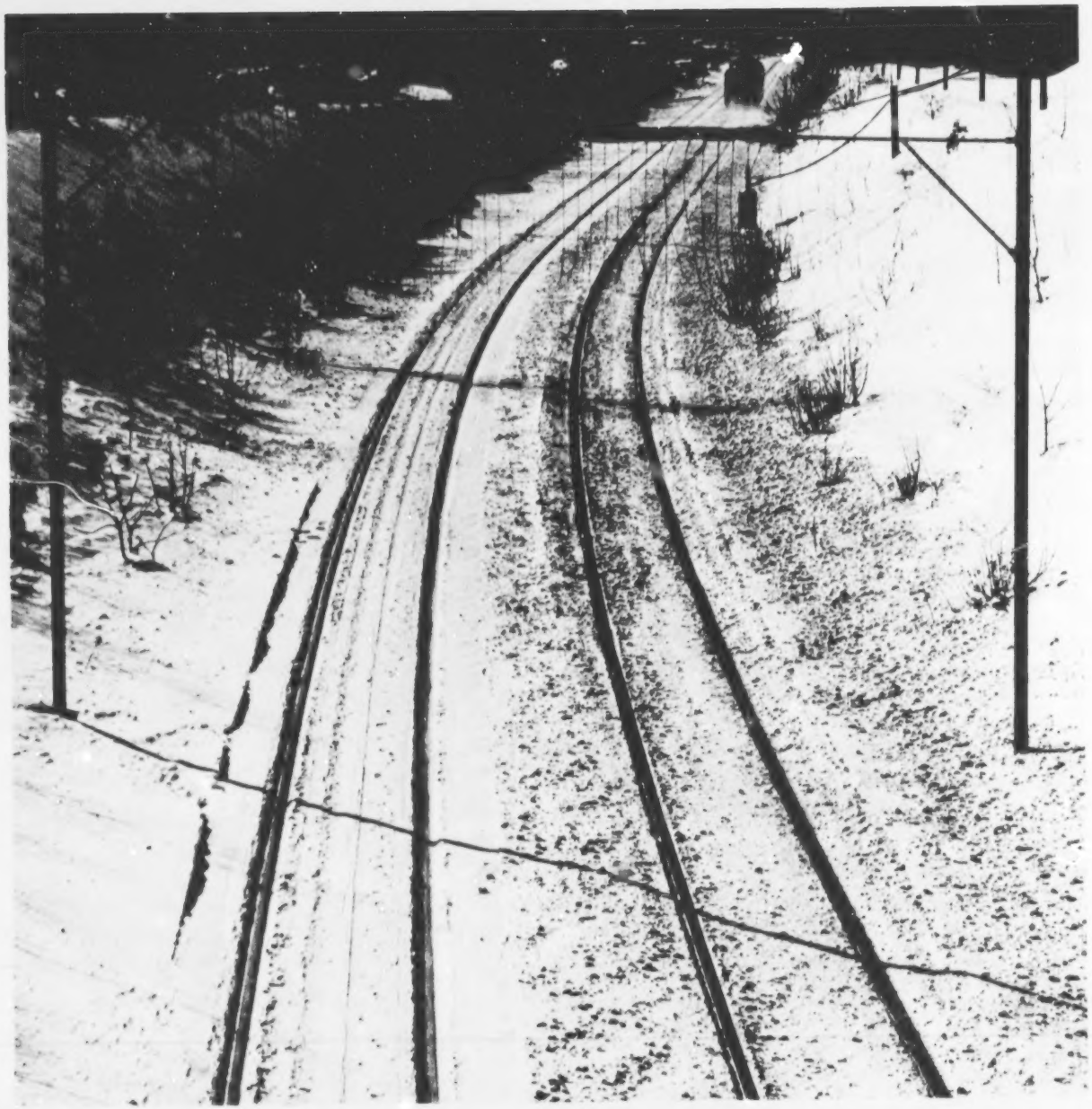


Photo Researchers, Inc.

66

67

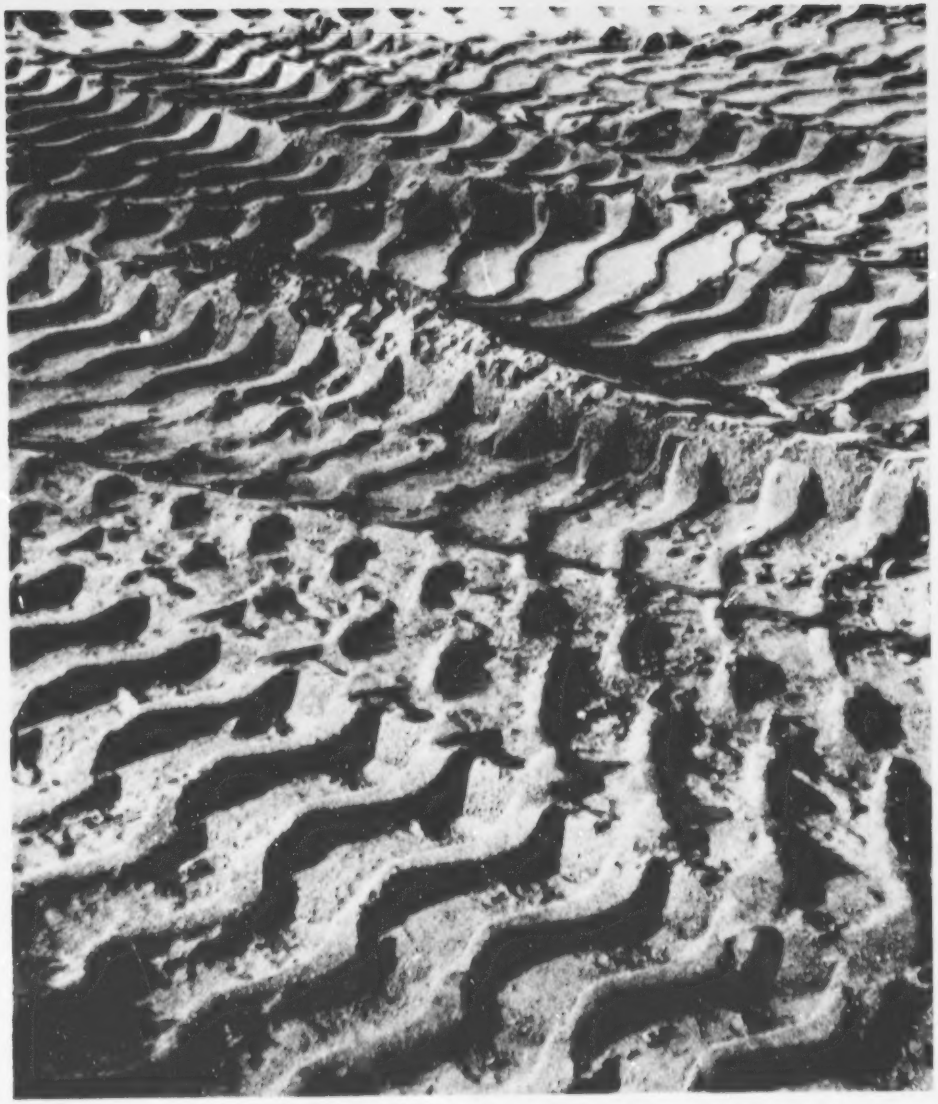
Rockford (Ill.) Register-Republic Photo By Don Holt



Victor Stokes, E.D.C.

OTHER TRACKS

What made the grooves in the mountain?



Which marks were made by water?

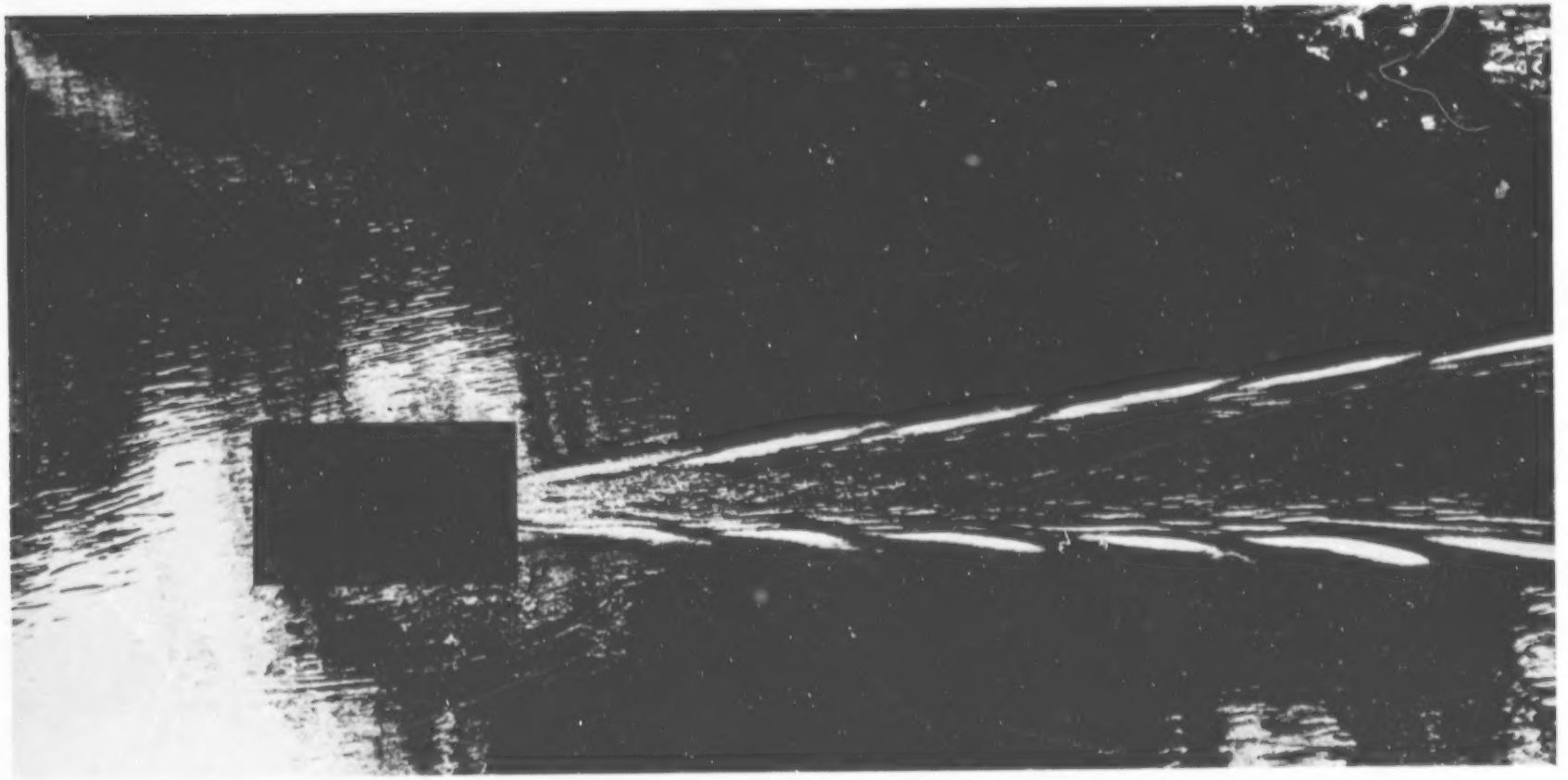
72

73

Philip Gendreau

74

What makes the wake of a ship white?



Eli Finer—De Wys, Inc.

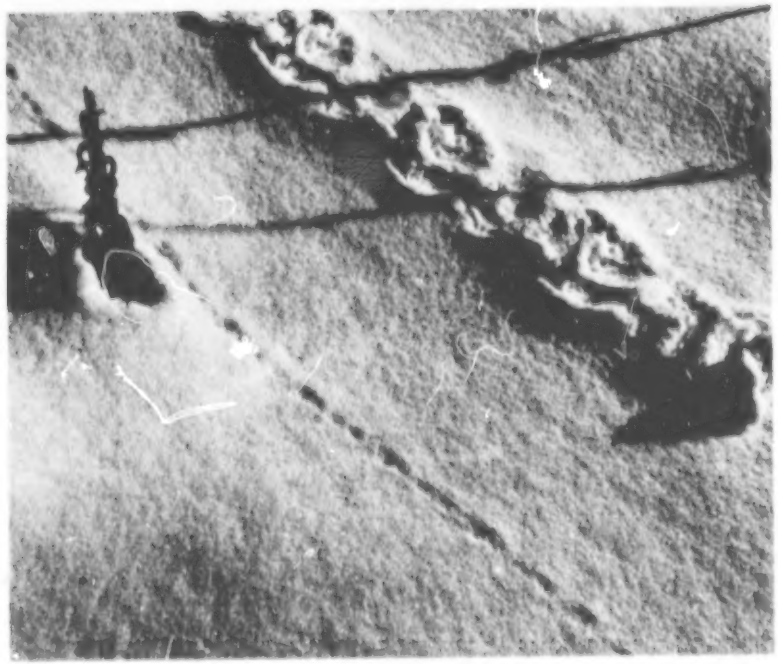
What could have caused this wake?

75

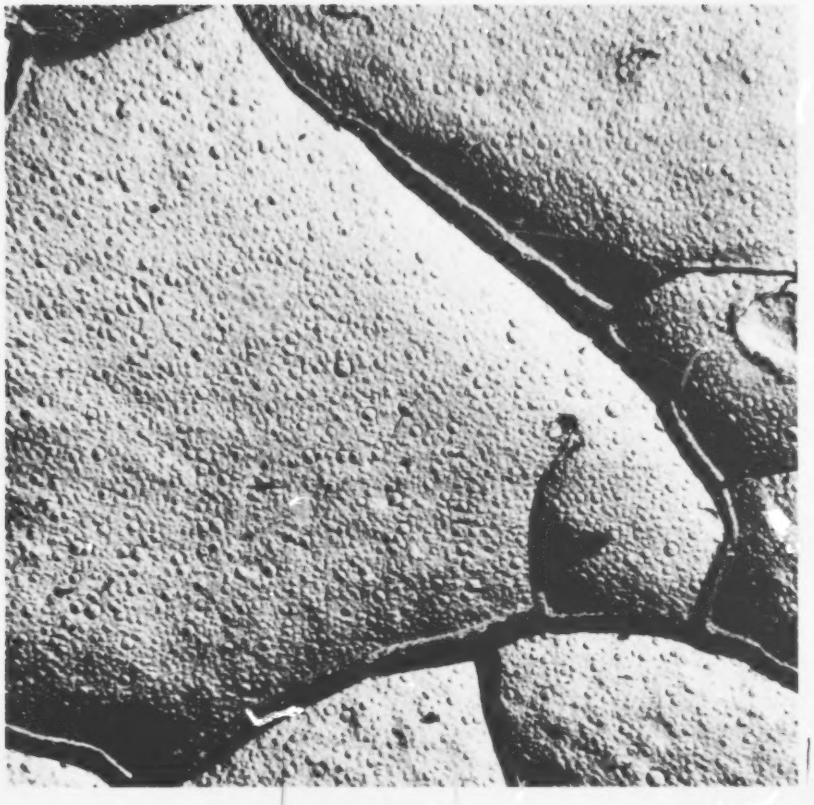
76

77

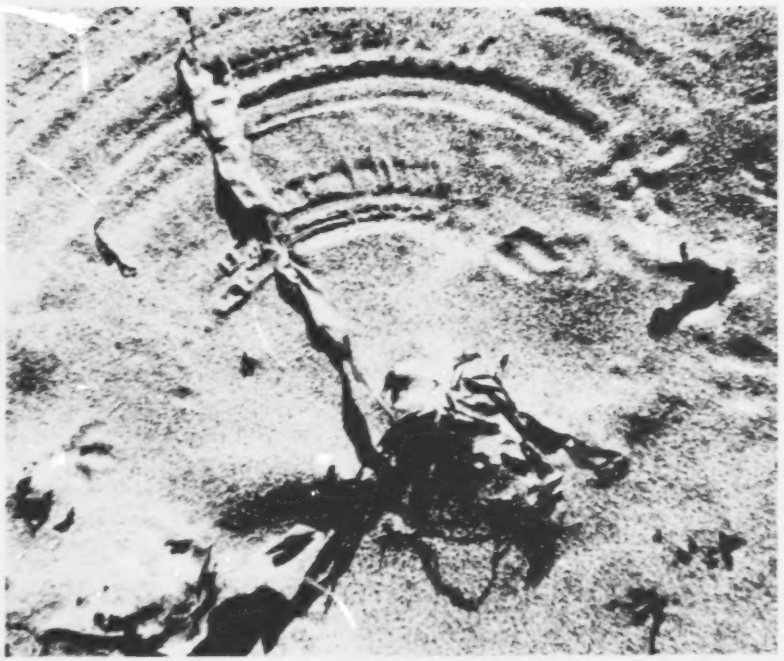
Did animals make . . .



78



. . . any of these tracks?



79

80

Ewing Galloway

81

82

1 2 3 4 5 6 7 8 9 10 EBEB 80 79 78 77 76 75 74 73 72 71